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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yakov Kamen

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EXAMINER

VAN HANDEL, MICHAEL P

ART UNIT

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2424

MAIL DATE

DELIVERY MODE

08/31/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/997,336	Applicant(s) KAMEN ET AL.	
	Examiner MICHAEL VAN HANDEL	Art Unit 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-9,11,12,14-17,19-27 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-9,11,12,14-17,19-27 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/12/2010 has been entered.

Response to Amendment

2. This action is responsive to an Amendment filed 4/12/2010. Claims **1, 3, 4, 6-9, 11, 12, 14-17, 19-27, 31** are pending. Claims **1, 7, 9, 11, 12, 14-17, 22** are amended. Claims **2, 5, 10, 13, 18, 28-30** are canceled. Claim **31** is new. The examiner hereby withdraws the rejection of claims **9, 11, 12, 14-16, 22** under 35 USC 101 in light of the amendments.

Response to Arguments

3. Applicant's arguments regarding claims **1, 9, 17, and 31**, filed 4/12/2010, have been fully considered, but they are not persuasive.

Regarding claims **1, 9, and 17**, the applicant argues Davis et al. describes a way of shortening a title by comparing the title to be shortened with a library of previously shortened titles and that therefore Davis et al. teaches away from determining at least two meaningful words in a program title, wherein each of the at least two meaningful words appears at least once

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in a database containing full program titles. The examiner respectfully disagrees. The examiner first notes the rejection under 35 USC 112, first paragraph below. Davis et al. discloses an interactive computer program used to edit program listings data (col. 17, l. 44-46). A data processor determines how much space is required to display a title based on its character length (col. 18, l. 1-3). If the data processor determines that the title requires too much space to fit into one or more grid cells and if the title has not been previously edited, the title is presented to an editor using a display device connected to the data processor. The editor is then queried to alter the title, so that it will fit in the allotted space (col. 18, l. 12-21). Figure 11a illustrates that the editor found the words “BEST,” “SHOW,” and “TODAY,” as being meaningful for display, but in 60 and 30 minute grid slots found the words “BEST” and “SHOW” as being more meaningful than “TODAY” (Fig. 11a). The edits are then stored in a library of shortened titles (col. 18, l. 35-43; col. 19, l. 38-43; & Figs. 10A, 11a, 11b). With regard to the rejection below under 35 USC 112, first paragraph, and in the interest of expediting prosecution, the examiner interprets the titles stored in the database as being full titles. That is, a shortened title is now the “full” title for that particular grid slot size. For example, “BEST SHOW” is the full title for a 30 minute grid slot, “THE BEST SHOW” is the full title for a 60 minute grid slot, and “THE BEST SHOW TODAY” is the full title for a 90 minute grid slot (Fig. 11a).

Regarding claim **31**, the applicant argues that Davis et al. fails to teach displaying the full program title in a program title field of the electronic program guide when the program title field is magnified. The examiner respectfully disagrees. Davis et al. discloses that the full title is displayed if it fits in the grid cell (col. 19, l. 2-10, 23-25) and that a title may be stored in different lengths for the different grid cell sizes that may occur, for example, when part of the

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cell extends beyond the grid (Figs. 5b, 5c, 7b, 7c). For example, a two hour movie may require four different titles to fit into each of the four different size grid cells (30, 60, 90, 120 minutes)(col. 17, l. 66-67 & col. 18, l. 1). The examiner interprets a grid cell size large enough to contain the whole title to be a magnified program title field, as currently claimed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims **1, 3, 4, 6-9, 11, 12, 14-17, 19-27, 31** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to claims **1, 9, and 17**, the examiner fails to find support in Applicant's specification for "a database containing full program titles." Paragraph 25 of published version of Applicant's specification US 2002/0087985 describes an example of a database containing 50,000 program titles (p. 2, paragraph 25 of published version of Applicant's specification US 2002/0087985). Applicant's specification does not state that these are full program titles. In the interest of expediting prosecution, the examiner interprets a full title to be the title as stored in the database.

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Claims **3, 4, 6-8, 11, 12, 14-16, 19-27, and 31** are rejected as being dependent on the aforementioned independent claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **1, 9, 17, 21-23, 25, 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Fleischer.

Referring to claims **1, 9, and 17**, Davis et al. discloses a method/non-transitory machine-readable storage medium/apparatus comprising:

- determining at least two meaningful words in a program title of an electronic program guide, wherein each of the at least two meaningful words appears at least once in a database containing full program titles, the at least two meaningful words including a first word and a second word (if a title has not been previously edited and the title is too long for its grid size, an editor edits the title to fit the grid. Figure 11a illustrates that the editor found the words “BEST,” “SHOW,” and “TODAY,” as being meaningful for display, but in reduced 60 and 30 minute grid slots found the words “BEST” and “SHOW” as being more meaningful than the word “TODAY.” The edits are then stored in a library of shortened titles)(col. 18, l. 12-21, 35-43; col. 19, l. 38-43; & Figs. 10A, 11a, 11b);

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- selectively removing a less descriptive word from the program title (col. 18, l. 12-21);
- determining a plurality of essential words of the program title based on a meaning of the program title, wherein the plurality of essential words convey the meaning of the program title (col. 17, l. 60-67 & Fig. 11a);
- determining the number of characters necessary to display the plurality of essential words (col. 18, l. 1-3); and
- removing an essential word if the number of characters necessary to display the plurality of essential words is greater than the specified number of characters, to create an abbreviated program title (col. 18, l. 35-43 & Figs. 10A, 10B); and
- displaying the abbreviated program title in a program title field of the electronic program guide (Figs. 5a-5c, 7a-7c, & 11a).

Davis et al. further discloses a library of shortened titles for determining if a title has been previously shortened (col. 18, l. 35-45). Davis et al. does not specifically disclose determining that the first word appears in the database at a greater frequency than the second word and determining that the first word is a less descriptive word in response to determining the first word appears in the database with a greater frequency than the second word. Fleischer discloses condensing text by determining words and phrases of greatest significance. Fleischer discloses determining how frequently words and word phrases appear and determining that words and word phrases that appear less frequently have greater significance (col. 1, l. 55-59; col. 3, l. 18-22, 27-30, 40-50; & col. 4, l. 53-64). For example, if the noun phrase “black cat” appears 20 times in a document and the noun phrase “green cat” appears 15 times in the document, the phrase “green cat” is maintained in the summarized text, since it is not as frequently used and is

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determined to be more suggestive of the document's subject. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to include a step of determining meaningful words from the database of Davis et al. to automatically remove words on the basis of frequency appearance, such as that taught by Fleischer in order to provide automatic means for providing a sufficient synopsis of material for a reader (Fleischer col. 1, l. 25-31).

Further referring to claim **17**, Davis et al. discloses a memory 115 (col. 17, l. 49-50 & Fig. 1).

Referring to claims **21-23**, the combination of Davis et al. and Fleischer teaches the method/machine-readable storage medium/apparatus of claims 1, 9, and 17, respectively, wherein in addition to removing the less descriptive word, the method further includes:

- parsing the text of the program title (Davis et al. col. 17, l. 48-50, 60-67; col. 18, l. 1-3, 13-21; & Figs. 10A, 11a);
- determining at least one nonessential, nonrelational word of the program title (Davis et al. col. 18, l. 12-21; col. 19, l. 38-43; & Figs. 10A, 11a); and
- removing the nonessential, nonrelational word from the program title (Davis et al. Figs. 10A & 11a).

Referring to claim **25**, the combination of Davis et al. and Fleischer teaches the apparatus of claim 17, wherein the apparatus is a head end (Davis et al. Fig. 1).

Referring to claim **31**, the combination of Davis et al. and Fleischer teaches the method of claim 1, further including displaying the full program title in a program title field of the electronic program guide when the program title field is magnified (if the grid cell is large enough, the entire title is displayed)(Davis et al. col. 19, l. 2-10, 23-25).

8. Claims **3, 4, 8, 11, 12, 16, 19, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Fleischer and further in view of Kudrolli et al.

Referring to claims **3, 11, and 19**, the combination of Davis et al. and Fleischer teaches the method/non-transitory machine-readable storage medium/apparatus of claims 1, 9, and 17, respectively. The combination of Davis et al. and Fleischer further teaches parsing the text of the program title (Davis et al. col. 17, l. 48-50, 60-67; col. 18, l. 1-3, 13-21; & Figs. 10A, 11a), determining at least one nonessential, nonrelational word of the program title (Davis et al. col. 18, l. 12-21; col. 19, l. 38-43; & Figs. 10A, 11a), and removing the nonessential, nonrelational word from the program title (Davis et al. Figs. 10A & 11a). The combination of Davis et al. and Fleischer does not specifically teach:

- determining at least one relational word of the program title; and
- replacing the at least one relational word with a representative character.

Kudrolli et al. discloses replacing the word “and” with the character “&” in order to cope with display space constraints in computer software (Fig. 20). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Davis et al. and Fleischer to include replacing the word “and” with the character “&,” such as that taught by Kudrolli et al. in order to make program guides more useful for a viewer and more pleasant to watch (Davis et al. col. 2, l. 38-41).

Referring to claims **4, 12, and 20**, the combination of Davis et al., Fleischer, and Kudrolli et al. teaches the method/non-transitory machine-readable storage medium/apparatus of claims 1, 11, and 17, respectively, further parsing the text of the program title (Davis et al. col. 17, l. 48-

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50, 60-67; col. 18, l. 1-3, 13-21; & Figs. 10A, 11a), determining at least one nonessential, nonrelational word of the program title (Davis et al. col. 18, l. 12-21; col. 19, l. 38-43; & Figs. 10A, 11a), removing the nonessential, nonrelational word from the program title (Davis et al. Figs. 10A & 11a), determining at least one relational word of the program title (Kudrolli et al. Fig. 20), and replacing the at least one relational word with a representative character (Kudrolli et al. Fig. 20). The combination of Davis et al., Fleischer, and Kudrolli et al. further teaches including abbreviating at least one of the plurality of essential words if the number of characters necessary to display the plurality of essential words is greater than the specified number of characters (Kudrolli et al. col. 7, l. 48-55).

Referring to claims **8** and **16**, the combination of Davis et al., Fleischer, and Kudrolli et al. teaches that an essential word occurring most frequently in the database is removed (Kudrolli et al. col. 7, l. 40-47).

9. Claims **6**, **14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Fleischer and further in view of Knauff et al.

Referring to claims **6** and **14**, the combination of Davis et al. and Fleischer teaches the method/non-transitory machine-readable storage medium of claims 21 and 22, respectively. The combination of Davis et al. and Fleischer does not specifically teach that the at least one nonessential, nonrelational word comprises all of the words selected from the group consisting of adverbs, adjectives, prepositions, and articles. Knauff et al. discloses an electronic document retrieval system that removes adjectives or adverbs from the document prior to presenting the document to an information retrieval (IR) engine. It would have been obvious to one of ordinary

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skill in the art at the time that the invention was made to modify the combination of Davis et al. and Fleischer to include removing adjectives or adverbs from an electronic document prior to its presentation such as that taught by Knauft et al. in order to provide information to a system that is almost as usable as the original (Knauft et al. col. 2, l. 31-33).

NOTE: The USPTO considers the applicant's "selected from the group consisting of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

10. Claims **7**, **15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Fleischer, further in view of Kudrolli et al., and still further in view of Hejna, Jr.

Referring to claims **7** and **15**, the combination of Davis et al., Fleischer, and Kudrolli et al. teaches the method/non-transitory machine-readable storage medium of claims 4 and 12, respectively. The combination of Davis et al., Fleischer, and Kudrolli et al. does not specifically teach that the at least one essential word comprises all of the words selected from the group consisting of subjects, objects, nouns, and verbs. Hejna, Jr. discloses removing articles and adjectives from conceptual information contained within TV broadcasts to provide output comprised only of nouns and noun phrases (col. 14, l. 16-19 & col. 16, l. 46-51). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Davis et al., Fleischer, and Kudrolli et al. to include providing output comprised only of nouns and noun phrases, such as that taught by Hejna, Jr. in order to make a program guide more useful to a viewer and more pleasant to watch (Davis et al. col. 2, l. 38-41).

NOTE: The USPTO considers the applicant's "selected from the group consisting of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

11. Claims **24, 26, 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. in view of Fleischer and further in view of Wehmeyer.

Referring to claim **24**, the combination of Davis et al. and Fleischer teaches the apparatus of claim 17. The combination of Davis et al. and Fleischer further teaches that the program listings data are edited through the use of a processor executing a text fit interactive computer program (Davis et al. col. 17, l. 44-46). The combination of Davis et al. and Fleischer also teaches that program listings can be listed in an interactive program guide implemented on a cable converter box, the converter box containing processor and memory capabilities (Davis et al. col. 20, l. 1-4). The program schedule information is downloaded and stored in the converter box memory and can be controlled locally (Davis et al. col. 20, l. 18-21, 24-26). The combination of Davis et al. and Fleischer does not specifically teach that the text fit system is implemented on a set-top box. Wehmeyer discloses an interface for locally customizing program guide information containing program descriptions (see Abstract) in a cable converter box (col. 10, l. 51-62). Generic program guide information, including program identifiers, is received and stored in the cable converter box (col. 11, l. 11-22). The user may edit text in a cell of the electronic program guide (EPG) by highlighting a cell, selecting an edit text mode key, and entering the desired text. For example, the user may change the text "THE GOLDEN ERA" to "THE ERA" (col. 16, l. 50-64 & Fig. 8). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the text fit system of the combination of Davis et al. and Fleischer to be implemented on the cable converter box, rather than the head

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end, such as that taught by Wehmeyer in order to provide users with ways to customize the program guide list (Wehmeyer col. 2, l. 13-15).

Referring to claims **26** and **27**, the combination of Davis et al., Fleischer, and Wehmeyer teaches the apparatus of claim 24, wherein a satellite transmits a signal to a satellite dish connected to the set-top box (Davis et al. col. 5, l. 26-28), which is connected to a television, and wherein the television is the display device (Davis et al. col. 21, l. 4-8 & Fig. 12).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Michael Van Handel/

Primary Examiner, Art Unit 2424

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